



California Regional Water Quality Control Board

Los Angeles Region

SEMS-RM DOCID # 1167278



Linda S. Adams
Cal/EPA Secretary

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: <http://www.waterboards.ca.gov/losangeles>

Arnold Schwarzenegger
Governor

May 27, 2008

Mr. Darrell Fah
Atlantic Richfield Company
6 Centerpointe Drive
La Palma, CA 90623

**UNDERGROUND TANKS PROGRAM – DIRECTIVE TO TAKE CORRECTIVE ACTION IN RESPONSE TO UNAUTHORIZED UNDERGROUND STORAGE TANK RELEASE PURSUANT TO HEALTH AND SAFETY CODE SECTION 25296.10 AND TITLE 23, CALIFORNIA CODE OF REGULATIONS, SECTIONS 2720-2727
ARCO SERVICE STATION # 5110
5731 FIRESTONE BL., SOUTH GATE (File No. I-12074) (B2)**

Dear Mr. Fah:

Pursuant to Health and Safety Code section 25296.10, you are required to take corrective action (i.e. Preliminary Site Assessment, Soil and Water Investigation, Corrective Action Plan Implementation, and Verification Monitoring) to ensure protection of human health, safety, and the environment. Corrective action requirements are set forth in California Code of Regulations (CCR), title 23, sections 2720 through 2727.

We have reviewed the Site Conceptual Model Update report dated April 15, 2008, submitted by your consultant, Secor International Inc., for the subject site. Followings are our comments:

Proposed Supplemental Remediation (CCR, Section 2726)

The site is currently remediated with an air sparging and soil vapor extraction (AS/SVE) system and has removed 50,303 pounds of hydrocarbons since the system was operated in April 2004. However, groundwater monitoring indicated that groundwater beneath the site was still significantly impacted with petroleum hydrocarbons. TPHg, benzene, MTBE, and TBA were detected as high as 16,000, 8,100, 270, and 3,700 mg/L, respectively. To expeditiously abate the impacted groundwater, Secor proposed on your behalf, in Appendix I, to supplement the remediation with the utilization of the oxygen diffusion technology:

- Slow oxygen release compounds (ORC) will be released into off-site wells MW-A2 and MW-A5.
- Oxygen will be injected into on-site wells MW-20, MW-A4, MW-A3, and possibly well MW-19 using iSOC oxygen diffusers.

The work plan is incomplete. We therefore do not concur with your proposal. For further review, you are requested to provide Board staff, by **June 27, 2008**, with the following information:

1. Establish injection points for ORC/oxygen. Groundwater monitoring wells are for groundwater monitoring purpose and therefore should not be used for injecting ORC/oxygen. Water

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samples will not represent the groundwater beneath the site with the presence of ORC/oxygen.

2. Provide a description of how the oxygen diffusion will be conducted. The description should include the radius of influence, the injection rate for ORC and oxygen, number of injection points and observation wells for onsite and offsite diffusion.
3. Provide a site map showing the location of all wells including the proposed injection points as well as observation wells, onsite and offsite.
4. Provide a construction diagram for injections.
5. Provide a site-specific Health and Safety Plan.

Failure to submit the required technical report by the specified due date, may result in an appropriate enforcement action by the Regional Board.

If you have any questions concerning this matter, please contact the undersigned at (213) 576-6658 or hnguyen@waterboards.ca.gov. Please always update the Regional Board with the name, contact person, address, telephone number, and e-mail address of the landowner(s), responsible party, and their consultant for the site.

Sincerely,

Original signed by

Harry D. Nguyen, PE
Water Resource
Control Engineer

cc: Ms. Yvonne Shanks, SWRCB, Underground Storage Tank Cleanup Fund
Mr. Tim Smith, LACDPW, Environmental Programs Division, Underground Tanks
Ms. Nancy Matsumoto, Water Replenishment District of Southern California
Mr. Andrew Modugno, Secor International, Inc.

